

# ***Channel Master®***

HD/SD IPTV SET-TOP BOX

## QUICK START GUIDE



CM-7100

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# Warning and Safety Information

Please read this user's manual before operating this product. The information contained in this document is subject to change without notice. Features or specifications may be different depending on the type of set-top box purchased.

## About our Company

Thank you for selecting our HD IP Set-Top Box Product. This product is the result of this company's outstanding experience and total commitment to quality and performance. It is our fervent hope that you thoroughly enjoy using this product. Please carefully follow these safety and installation guidelines to obtain the best performance, safety and to quickly begin enjoying the benefits of this product. Please keep this user's manual close to your HD IP Set-Top Box for future reference.

## Safe Use of This Product

Carefully follow the warnings and safety notices presented within this manual. Please pay special attention to the following indications of potentially hazardous situations:

### Warning:

Indicates a hazardous situation, which, if not avoided, could result in serious injury.

### Caution:

Indicates a situation, which, if not avoided, could damage this product or other devices.

### Note:

Indicates additional information for the user to make the user aware of possible problems and to help the user understand, use and maintain the product.

## Accessories

Use only those accessories and attachments provided with your HD IP Set-Top Box. Use of accessories or attachments that are not supplied or approved by the manufacturer may be unsafe, detrimental to the life or performance of the HD IP Set-Top Box and will immediately invalidate any product warranty.

## Operational Environment

Avoid high moisture conditions and keep away from all liquids or humidity. This product must not be exposed to dripping, splashing or high humidity. Do not use this product in any location where it may come in contact with any liquid or vapor.

## Product Care and Servicing

Attempts to dismantle the product may be unsafe, may be detrimental to the life or performance of the product and will immediately invalidate any product warranty. Servicing must be done by qualified service personnel only.

## Proper Cleaning

Proper cleaning will prevent damage to the unit and its components. The product, its accessories and attachments should only require occasional wipe with a dry cloth. Remove plug from the wall outlet before cleaning the product. Do not spray any substance or use any polishes, thinners, abrasive cleaning products, liquids or aerosol products to clean the product, its accessories or attachments.

## Installation and Set-Up

A proper operating environment is required to safely utilize this product, and to avoid malfunctions or damage to the unit. The HD IP Set-Top Box must be placed horizontally on a hard flat surface. Do not place the HD IP Set-Top Box where it may be subject to physical shock or vibration or where the product may drop, topple, slide or shake, which may cause personal injury or damage to the product not covered by the manufacturer's warranty. The HD IP Set-Top Box must not be moved nor exposed to vibration during operation otherwise loss of recorded content or damage may occur. Openings on the housing of the HD IP Set-Top Box are required for ventilation. Do not block or obstruct the airflow through these openings. Do not operate the HD IP Set-Top Box on a soft surface such as carpet, rug, bed, etc. as these surfaces will obstruct airflow, may cause the product to overheat and will invalidate the warranty. Do not install the HD IP Set-Top Box into any bookcase, shelf or rack without ensuring that a minimum of 4" of clear space is available at the front, rear, sides and top of the product. Do not install the HD IP Set-Top Box where it may be exposed to direct sunlight or radiant, convection or heat conducted from an open fire or radiator. The HD IP Set-Top Box should not be placed on any

surface that may become warm during use (such as on top of a VCR or A/V amplifier) and nothing should be placed on top of the HD IP Set-Top Box. Do not cover the HD IP Set-Top Box. Objects containing liquids, such as vases, flowerpots, etc. must not be placed on top of the product. Do not lift nor move the HD IP Set-Top Box during operation. If the product must be moved, first unplug the power cord, then wait 30 seconds before moving the product.

## Power Source

The HD IP Set-Top Box must ONLY be used with the power adapter supplied by the manufacturer. If it is necessary to operate the product in another country or geographical area with a different power source, an approved adapter for that country or location must be obtained from your retailer or service provider. The HD IP Set-Top Box and power supply will get warm to the touch during normal use. If the HD IP Set-Top Box or its power supply or attachments become hot to the touch, immediately unplug the HD IP Set-Top Box from the power supply and call your service provider.



**WARNING:** Because the power adapter is designed only for the use with your HD IP Set-Top Box, connecting it to other devices may damage the adapter or other devices.

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# Introduction

## 1. HD IP Set-Top Box Introduction

The HD IP Set-Top Box is a digital system designed and built to receive interaction with the unlimited world of IP service provider viewing package content including TV channels, audio programs, music, games, and much more, all while enjoying real time access to the Internet at the touch of a button! With applications in the broadband environment, the HD IP Set-Top Box has multicast IPTV support (IGMP), VOD (video on demand), AOD (audio on demand), PPV (pay per view), EPG, CA, and digital stereo audio support. All provided through the HD IP Set-Top Box's powerful hardware platform, strong multi-audio/video H.264, MPEG2, MPEG4 decoding support. See below for more details, features, and specifications about your new HD IP Set-Top Box.

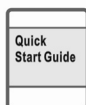
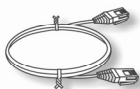
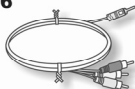
### 1.1 Main Features

- Embedded SoC Processor with 512MB DDR2 SDRAM
- Multi Video Decoder support: MPEG2, MPEG4 H.264
- Multi Audio Decoder support: AAC and other audio formats.
- Digital stereo audio via S/PDIF & HDMI
- Video Output: NTSC or PAL, both 4:3 and 16:9. Composite and HDMI video output support.
- Multicast IPTV support (IGMP)
- VOD (video on demand) support (RTSP)
- Remote management and upgradable
- USB 2.0 compliant, up to 480Mbps

## 2. Package Contents and Accessories

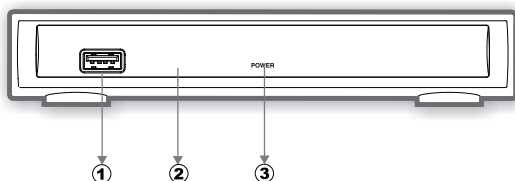
The package includes the following items and accessories:

1. HD IP Set-Top Box Unit
2. Remote Control Unit
3. Quick Start Guide
4. Power Adapter
5. Ethernet Cable
6. 3.5mm jack to RCA Audio/Video Cable

**1****2****3****4****5****6**



## 2.1 Front Panel

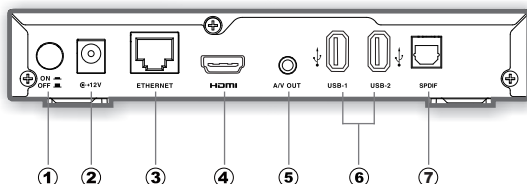


1. USB port for external devices
2. IR Receiver
3. LED status light

### LED Definition

Steady Red:	The power is turned-on.
Steady Green:	The device has finished booting up and is ready for use.
Blinking Red:	System error.
Blinking Green:	Valid signal is received from remote control.

## 2.2 Rear Panel



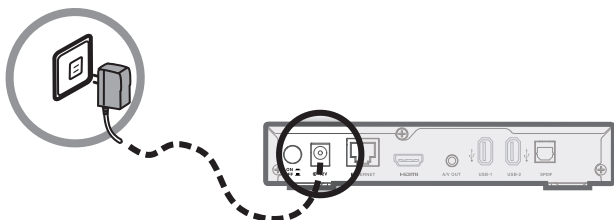
1. Push the button to switch on/off the power
2. DC power input jack
3. Ethernet RJ-45 connection for network access
4. HDMI digital video/audio output
5. 3.5mm A/V jack for analog audio/video output
6. USB Port for external devices
7. S/PDIF out for digital stereo audio

# Installation

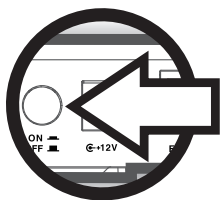
## 3. Turn on this product

Follow the steps below to turn on this product.

1. Connect the power input jack on the rear panel using the power adapter that came with this product.
2. Plug the power adapter to a power outlet.



3. Push the power button on the rear panel to turn on this device.



4. You can push the power button on the remote control to switch this device between the standby mode and the active mode.

## 4. Configuring Your HD IP Set-Top Box

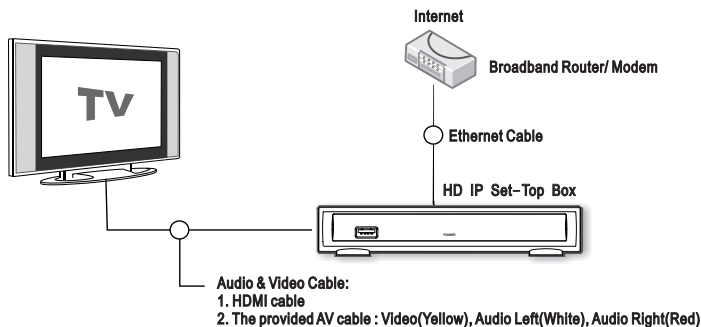
The following section describes how to connect the HD IP Set-Top Box to your home entertainment TV system. Instructions and diagrams will show you how to setup and configure the HD IP Set-Top Box:

- TV and Network Connection
- TV and Home Network Connection
- Digital Stereo Audio System and TV Connection



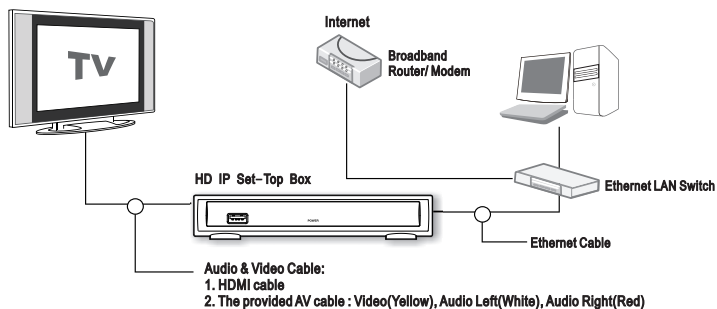
**NOTE:** Use proper connection cables to suit specific applications. Some televisions and home entertainment audio/video connection requirements may vary.

### 4.1 TV And Network Connection

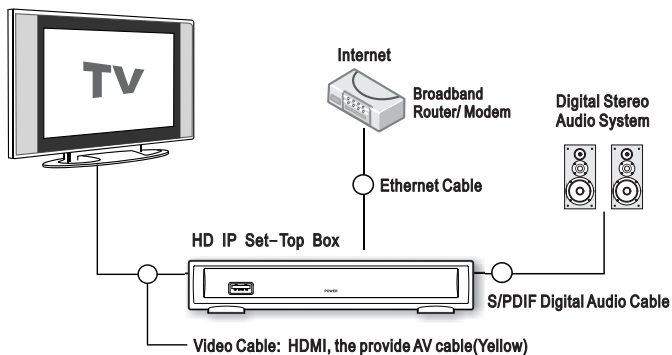


**NOTE:** HDMI cables convey both video and audio signals.

## 4.2 TV And Home Network Connection



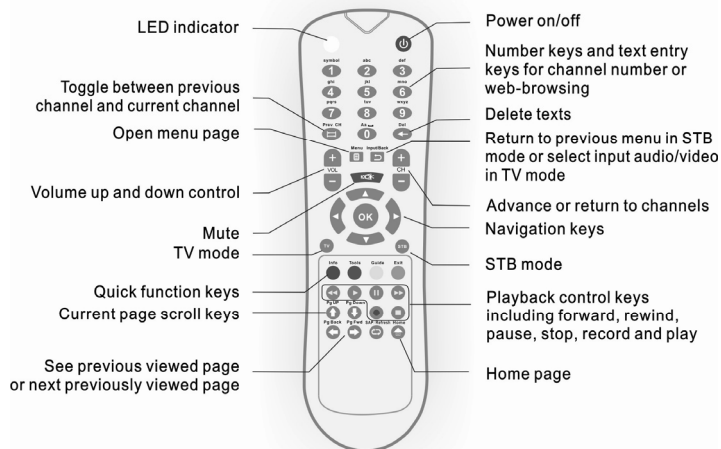
## 4.3 Digital Stereo Audio System and TV Connection



# Operating

## 5. Remote Control Introduction

### 5.1 Remote Control Keypad Description



Your remote control is designed to control your HD IP Set-Top Box and your TV. Your IPTV service provider may program your remote control or provide you with a different remote control. If the remote control has not been programmed, please consult your service provider.

**CAUTION:** To avoid malfunctions or damage to the remote control, do not use an old battery with a new battery. Remove batteries if storing unit for a long period of time. Properly dispose of old batteries.

**NOTE:** The remote control requires 2 AAA batteries.

## 5.2 Using Remote Control in TV and STB Modes

The remote control operates in one of the two modes:


**TV**

**TV Mode**


**STB**

**STB Mode**

A mode is selected by pressing the TV or STB mode selection button of the remote control.

When pressed, the LED indicator on the remote control will blink to indicate the mode has been changed.

### TV Mode





In the TV Mode, which is selected by using the TV button on the remote control, you will be able to make the adjustments toward your TV after pairing the remote control and your TV with TV brand codes. See the following steps to setup the remote control:

1. Identify the brand of the TV that is in use, e.g. Sony, Tatung, etc.
2. Find the TV brand listed in the TV brand codes table in Appendix.
3. Simultaneously press and hold the blue (exit) and TV buttons on the remote control.
4. After approximately 2 seconds, the remote control LED indicator will light up.
5. Release the TV and blue (exit) buttons – the remote control LED indicator remains illuminated.
6. Now enter the brand code.
7. As each of the digits is entered, the remote control LED indicator will briefly flash off and on again.
8. When the last digit has been entered, the remote control LED indicator will turn off.
9. Verify that the remote control operates the TV.



**NOTE:** Most TV brands have more than one brand code listed in the brand code table – if this is the case try all brand codes that are listed for that make until a suitable match is found. If no brand code is listed for the TV, try brand codes for Philips and NEC TVs.







## Functions of the remote control in the TV mode:



















Function	Button Symbol	Description
Power		Power on/ off TV Power.
Volume up/down		TV volume up and volume down.
Mute		TV mute and un-mute.
Input		Cycles the TV through the available AV inputs.

## STB Mode

Press the STB button on the remote control to use this remote control in the STB mode.

## Functions of the Remote Control in the STB mode:

Function	Button Symbol	Description
Power		Power on/ off the STB power.
Direct channel number entry		Allows direct entry of STB channel numbers. Also functions as text entry buttons when web-browsing.  <b>NOTE:</b> Text entry may not be supported by your Set-Top Box.
Volume up/down		TV volume up and down.  <b>NOTE:</b> These buttons function the same in both the TV mode and the STB mode.
Channel up/down		STB channel up and down.

Function	Button Symbol	Description
Mute		TV mute and un-mute.  <b>NOTE:</b> This button functions the same in both the TV mode and the STB mode.
Back		Leave current menu and return to previous menu.
Prev.CH		Toggles between previous channel and current channel.
Menu		Displays the main menu.
Navigation and OK		Navigates through the menus and web pages.
Del		Deletes texts that you entered.
Navigation		Colored navigation buttons.
Video control		Rewind
		Play
		Pause
		Fast forward
		Stop
		Record
Page control		Scroll up and down the current page.
		View the previous page or the next page (if already visited).
		Refresh (reload) the current page.
		Jump to home page.



# Appendix

## 6. Troubleshooting Guide

Use this troubleshooting guide for easy solutions to correct common problems. If this troubleshooting guide does not solve a specific problem, contact your service provider.

Symptom	Solution
The HD IP Set-Top Box cannot be turned on or placed in the active mode.	<ul style="list-style-type: none"> <li>The power button on the rear panel is switched off.</li> <li>The HD IP Set-Top Box may have just received a software update and may not have powered on because new software is in the process of being installed. Wait a few minutes. The system will restart automatically after completing the software upgrade.</li> <li>Confirm proper power connection to the HD IP Set-Top Box and to an outlet.</li> <li>Try unplugging the unit from the outlet, plug it back in, and then power on again.</li> <li>Remote control may need new batteries. Try new batteries in the remote control.</li> </ul>
No response from the remote control.	<ul style="list-style-type: none"> <li>Confirm that the remote control is in fact on and that the buttons are being pressed firmly.</li> <li>Verify that the IR signal from the remote control is received. The LED on the HD IP Set-Top Box blinks when receiving signals.</li> <li>Be sure that there is nothing obstructing the remote control.</li> <li>Aim the remote control directly at the HD IP Set-Top Box front panel, not the TV.</li> <li>Do not stand too far from the HD IP Set-Top Box.</li> <li>Check the batteries in the remote control.</li> </ul>

Symptom	Solution
The system asked me for an activation code	<ul style="list-style-type: none"> <li>• The activation code is used to start the system which should have been configured by your service provider. Please contact your service provider for the code.</li> </ul>
There is no audio when viewing video.	<ul style="list-style-type: none"> <li>• Be sure that the Mute button on the remote control or the TV has not been activated.</li> <li>• Confirm that the HD IP Set-Top Box audio output is connected to the TV or home theater input port correctly, and the correct audio cables are firmly connected.</li> </ul>
There is no video shown on the TV screen.	<ul style="list-style-type: none"> <li>• Be sure that the cables are connected and the TV is set to the appropriate HD IP Set-Top Box input port. (HDMI or A/V output)</li> <li>• Confirm that the HD IP Set-Top Box is tuned to the correct channel.</li> <li>• Power off the TV and then power off the HD IP Set-Top Box. Wait two seconds and then power on the TV and HD IP Set-Top Box again.</li> <li>• In some cases, not all channel options will be available for display.</li> </ul>
The menu pages do not appear.	<ul style="list-style-type: none"> <li>• Be sure that the TV is firmly connected and set to the appropriate HD IP Set-Top Box input port.</li> </ul>
No subtitles or program guides are appearing on the TV screen.	<ul style="list-style-type: none"> <li>• Confirm that the subtitles on the HD IP Set-Top Box have been enabled in the settings menu.</li> </ul>

Symptom	Solution
There are black bars on the right and left sides of the screen (if using a Wide screen TV).	<ul style="list-style-type: none"> <li>• Unless the stretch setting is enabled, Wide screen TVs will sometimes display 4:3 programs with left and right black bars (some programs are broadcast in 'pillar-box' format that utilizes black bars on the left and right of the display video).</li> <li>• Select a proper frame format that is suitable for your TV frame type in the Settings menu.</li> </ul>
Black bars appear above and below the video (if using a Wide screen TV).	<ul style="list-style-type: none"> <li>• Some programs appear in 'letterbox' format with black bars above and below the TV picture.</li> <li>• Select a proper frame format that is suitable for your TV frame type in the Settings menu.</li> <li>• A zoom feature is provided in some Wide screen TVs, that may remove black bars (see your TV user's manual for zooming 4:3 video details).</li> </ul>
No yellow input jack for video on TV.	<ul style="list-style-type: none"> <li>• Use an HDMI cable to connect your TV with this product.</li> </ul>
Unused jacks on HD IP Set-Top Box.	<ul style="list-style-type: none"> <li>• Not every type of jack will be utilized.</li> <li>• See installation section of this user's manual.</li> </ul>
No Internet connection.	<ul style="list-style-type: none"> <li>• Confirm that the Ethernet cable is properly connected to the Ethernet jack at the back of the HD IP Set-Top Box.</li> <li>• Make sure that you are using the correct type of cable.</li> <li>• Verify that your home network is working properly by accessing your home computer.</li> <li>• Reset the network router and modem after connecting an Ethernet cable to the HD IP Set-Top Box by unplugging or turning off the network router and modem, wait a few seconds, and then re-plug the network router and modem.</li> </ul>

## 7. TV brand codes

Use the following codes to pair the remote control with your TV. See the remote control introduction chapter for detailed information.

We recommend that you write down the brand code of your TV after you pair the remote control with your TV successfully:



**Abex** 0081  
**Action** 0067  
**Admiral**  
 0009, 0063, 0136, 0177, 0180,  
 0206, 0207, 0357  
**Adventira** 0332, 0333  
**Adventura** 0160, 0292  
**Aiko** 0103  
**Aiwa** 0006, 0007, 0008  
**Akai**  
 0113, 0114, 0164, 0181, 0190  
**Allegro** 0009, 0222  
**Alleron** 0136  
**A-Mark**  
 0171, 0178, 0179, 0202, 0357  
**Ambassador** 0098  
**Ampro** 0290  
**Amstrad** 0030, 0098  
**AMTRON** 0342  
**Ansonic** 0002  
**ASa**  
 0014, 0024, 0025, 0031, 0032,  
 0036, 0118, 0131, 0219  
**Anam**  
 0068, 0083, 0148, 0177, 0239,  
 0253, 0294, 0342  
**AOC**  
 0005, 0014, 0029, 0048, 0100,  
 0113, 0114, 0136, 0152, 0176,  
 0177, 0188, 0190, 0200, 0202,  
 0204, 0214, 0278, 0280, 0295  
**Apex**  
 0057, 0340, 0341, 0355  
**Archer** 0202, 0357  
**ATVIO** 0358  
**Audiovox**  
 0103, 0177, 0202, 0235, 0342  
**AWA**  
 0040, 0082, 0193, 0266  
**Baysonic** 0177  
**Beuamark**  
 0114, 0136, 0141, 0219  
**Belcor** 0100, 0114, 0295

**Bell & Howell**  
 0063, 0136, 0175, 0177, 0180,  
 0195  
**BENQ**  
 0304, 0273, 0335, 0336  
**Blue Star** 0054  
**BPL**  
 0054, 0218, 0256, 0257, 0258  
**Bradford** 0177, 0342  
**Brockwood** 0100, 0295  
**Broksonic**  
 0177, 0202, 0234, 0286  
**Candle**  
 0063, 0086, 0100, 0103, 0113,  
 0114, 0132, 0148, 0160, 0171,  
 0176, 0178, 0188, 0209, 0295  
**Capehart** 0280  
**Carver** 0037, 0060  
**Casio** 0002, 0003  
**CCE** 0285  
**Celebrity** 0013, 0046  
**CELERA** 0057  
**Centurion** 0114, 0175  
**Changhong**  
 0018, 0057, 0355  
**Chaparral** 0210  
**ChiMei** 0260, 0338  
**Chun Yun**  
 0005, 0014, 0029, 0041, 0076,  
 0089, 0100, 0113, 0121, 0202,  
 0204, 0214, 0242  
**Chung Hsin**  
 0005, 0014, 0020, 0024, 0073,  
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**Cineral** 0103, 0235  
**CITIZEN**  
 0342, 0063, 0086, 0100, 0103,  
 0113, 0114, 0132, 0148, 0160,  
 0171, 0176, 0178, 0188, 0209,  
 0295  
**CIX** 0357  
**Clairtone** 0048  
**CLASSIC** 0057, 0355

**Color Tac** 0267**Colortyme**

0113, 0114, 0149, 0176, 0295

**Concerto**

0100, 0113, 0114, 0176, 0295

**Contec/Cony**0048, 0107, 0148, 0157, 0173,  
0177, 0192, 0201, 0342**Coronado** 0178, 0179**COX** 0265**Craig** 0148, 0177, 0342**Crosley**0016, 0027, 0033, 0043, 0049,  
0072, 0135**Crown** 0177, 0178, 0342**Curtis Mathes**0009, 0037, 0051, 0063, 0065,  
0092, 0100, 0108, 0113, 0114,  
0129, 0140, 0171, 0175, 0176,  
0178, 0180, 0195, 0196, 0222,  
0235, 0255, 0265, 0295**CXC** 0148, 0177, 0342**Daewoo**0005, 0086, 0100, 0103, 0113,  
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0176, 0177, 0178, 0188, 0190,  
0194, 0214, 0217, 0235, 0251,  
0252, 0262, 0295**Daytron**0100, 0103, 0113, 0114, 0175,  
0176, 0178, 0188, 0295**DELL** 0343, 0344, 0114**Denon** 0255**Dimensia** 0180**Dish Network** 0359**Distar** 0061**Dumont**

0100, 0219, 0236, 0295

**DUKANE** 0092**DURABRAND** 0345, 0346**Dwin** 0009, 0222**Dynatech** 0285**Electroband** 0013, 0046, 0048**Electrohome**0044, 0046, 0048, 0068, 0100,  
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0188, 0190, 0195, 0294, 0295**Elektra** 0063**Emerson**0048, 0054, 0061, 0084, 0097,  
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0133, 0134, 0135, 0136, 0137,  
0138, 0139, 0141, 0148, 0157,  
0158, 0169, 0175, 0176, 0177,  
0178, 0179, 0188, 0195, 0206,  
0209, 0234, 0235, 0277, 0279,  
0286, 0295, 0300, 0342**Envision**

0113, 0114, 0176, 0295

**Ether** 0089, 0100, 0202**Finlux** 0136**Fisher**

0117, 0168, 0175, 0195

**Funai/Fullness**0011, 0029, 0030, 0039, 0040,  
0042, 0136, 0148, 0177, 0342**Fortress** 0033**Fujitsu** 0033, 0136**Futuretech** 0177, 0342**GATEWAY** 0260**G.E.**0009, 0051, 0054, 0061, 0065,  
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0146, 0176, 0180, 0184, 0187,  
0222, 0235, 0239, 0265, 0294,  
0295**General** 0033, 0136**Gibraltar**

0100, 0114, 0219, 0295

**Gintai** 0205**Goldstar**0004, 0005, 0096, 0100, 0107,  
0113, 0114, 0157, 0171, 0175,  
0176, 0178, 0179, 0184, 0188,  
0190, 0191, 0219, 0223, 0248,  
0264, 0292, 0295**Goodmans** 0136**Go Video** 0171**Gradiente** 0100, 0165,  
0307(LCDTV)**Granada** 0164**Grandin** 0054, 0177**GRUNDY** 0342,**Grundig**0002, 0003, 0005, 0010, 0011,  
0012, 0013, 0017, 0026, 0028,  
0067, 0134, 0238, 0256, 0258,  
0306**Grunpy** 0136, 0177**GUESTVISION** 0167**HAIER** 0273, 0340, 0345, 0346**Hallmark**0100, 0113, 0114, 0136, 0176,  
0295**Harman Kardon** 0037**Harvard**

0100, 0136, 0177, 0342

**HCM** 0054**Hinari** 0136**Hisawa** 0054**HISENSE** 0340

**Hitachi**

0004, 0014, 0019, 0034, 0063,  
0069, 0086, 0095, 0099, 0100,  
0107, 0113, 0114, 0157, 0162,  
0164, 0173, 0176, 0178, 0179,  
0184, 0188, 0201, 0203, 0204,  
0207, 0214, 0224, 0225, 0238,  
0255, 0279, 0284, 0293, 0295,  
0300, 0311(LCDTV), 0092

**Hyundai**

0002, 0005, 0244, 0290, 0194

**Hypson** 0054

**ILO** 0323, 0347, 0348

**Ima** 0177, 0342

**Infinity** 0037, 0082, 0167

**INITIAL** 0347

**INSINGIA** 0345, 0354

**Inteo** 0219

**Janeil** 0160

**JBL** 0037, 0082, 0160, 0167

**JCB** 0013, 046

**JC. Penney**

0005, 0047, 0050, 0051, 0065,  
0100, 0101, 0107, 0108, 0113,  
0114, 0131, 0141, 0145, 0171,  
0175, 0176, 0178, 0180, 0184,  
0187, 0190, 0201, 0202, 0222,  
0265, 0278, 0295

**Jean**

0014, 0057, 0089, 0100, 0202,  
0204, 0205, 0214

**Jensen**

0113, 0114, 0176, 0295

**JVC**

0022, 0023, 0024, 0067, 0075,  
0081, 0093, 0107, 0129, 0157,  
0166, 0187, 0201, 0261,  
0165(LCDTV)

**Kaisui** 0054

**Kawasho**

0113, 0114, 0176, 0295

**KEC** 0171, 0177

**Kenwood**

0100, 0113, 0114, 0176, 0295

**KLH** 0057,

**Kloss Novabeam** 0060, 0109,  
0114, 0160

**KMC** 0178, 0179, 0188

**Kolin**

0005, 0014, 0020, 0024, 0041,  
0073, 0081, 0121, 0190, 0204,  
0269, 0271, 0248(LCDTV),  
0303(LCDTV)

**KONKA**

0243, 0342, 0350, 0351, 0352,  
0353, 0354, 0356

**KTV**

0048, 0113, 0114, 0128, 0177,  
0178, 0179, 0188, 0209, 0285,  
0342

**LG**

0100, 0114, 0156, 0179, 0223,  
0259, 0248, 0316(LCDTV)

**Lloytron** 0178

**Loewe** 0082

**Lodgenet** 0063, 0180

**Logik** 0063, 0177, 0180

**Luxman**

0100, 0113, 0114, 0176, 0295

**LXI**

0037, 0057, 0065, 0082, 0100,  
0101, 0114, 0175, 0180, 0195,  
0206, 0219, 0222, 0265, 0292

**Magnasonic** 0002, 0005

**Magnavox**

0037, 0042, 0060, 0082, 0100,  
0109, 0113, 0114, 0127, 0131,  
0132, 0136, 0162, 0163, 0167,  
0175, 0176, 0178, 0179, 0282,  
0287, 0295

**Majestic** 0063, 0180, 0236

**Marantz**

0037, 0060, 0082, 0109, 0113,  
0114, 0125, 0176, 0190, 0295

**Matsui** 0098, 0178

**Matsuka** 0055, 0087, 0227

**Matsushita** 0050, 0108

**MEDION** 0323

**Megatron**

0100, 0114, 0164, 0202, 0255,  
0295

**MEI** 0048

**Memorex**

0005, 0050, 0063, 0100, 0114,  
0171, 0175, 0180, 0195, 0295

**Midland**

0065, 0107, 0108, 0178, 0187,  
0219, 0236, 0265

**Mitsubishi/MGA**

0005, 0009, 0020, 0021, 0044,  
0090, 0097, 0100, 0113, 0114,  
0117, 0136, 0141, 0175, 0176,  
0188, 0190, 0206, 0226, 0227,  
0263, 0269, 0295

**Mitsui** 0177, 0276

**Motorola**

0009, 0037, 0083, 0187, 0206,  
0239, 0294, 0357

**Montgomery Ward** 0063, 0180

**Minutz** 0131, 0184

**MTC**

0005, 0048, 0100, 0113, 0114,  
0171, 0176, 0190, 0295

**MultiTech**

0136, 0177, 0285, 0342

**Multivision** 0124

**NAD**

0057, 0092, 0100, 0101, 0114,  
0295

**NEC**

0005, 0031, 0032, 0041, 0061,  
0068, 0079, 0080, 0100, 0113,  
0114, 0160, 0175, 0176, 0187,  
0190, 0288, 0295, 0311(LCDTV)

**Nesco** 0136**NETTV** 0260**Newave**

0089, 0106, 0205, 0206

**Nikkai**

0055, 0064, 0087, 0106

**Nikko**

0100, 0101, 0103, 0114, 0175,  
0219, 0222, 0265, 0295

**Noblex**

0061, 0062, 0063, 0066, 0067,  
0068, 0069

**NORCENT**

0309(LCDTV), 0340

**NTC** 0103**OLEVIA** 0248**ONCOMMAND** 0167**Onking** 0209**Onwa** 0177, 0342**Optimus**

0050, 0092, 0175, 0195, 0207

**Optonica**

0009, 0206, 0207, 0357

**Orion** 0136, 0177, 0234, 0286**Panasonic (National)**

0005, 0009, 0010, 0015, 0016,  
0017, 0028, 0037, 0050, 0058,  
0068, 0070, 0082, 0083, 0088,  
0089, 0094, 0101, 0108, 0114,  
0122, 0130, 0145, 0159, 0161,  
0165, 0167, 0171, 0175, 0187,  
0207, 0222, 0223, 0239, 0247,  
0254, 0255, 0265, 0268, 0293,  
0294

**PBI** 0107**Philco**

0005, 0037, 0060, 0068, 0082,  
0100, 0109, 0113, 0114, 0127,  
0132, 0154, 0157, 0162, 0163,  
0167, 0176, 0178, 0179, 0190,  
0234, 0255, 0282, 0294, 0295

**Philips**

0013, 0036, 0037, 0042, 0056,  
0060, 0068, 0082, 0100, 0109,  
0113, 0114, 0122, 0131, 0132,  
0154, 0156, 0157, 0162, 0163,  
0167, 0176, 0178, 0179, 0184,  
0198, 0215, 0216, 0219, 0256,  
0278, 0280, 0294, 0295

**Pilot**

0100, 0114, 0171, 0178, 0295

**Pioneer**

0074, 0092, 0100, 0108, 0113,  
0123, 0176, 0187, 0228, 0279,  
0295, 0300, 0325(Plasma TV)

**PIVA** 0349**Polariod** 0310(LCDTV)**Polestar** 0103**Portland**

0005, 0100, 0103, 0113, 0114,  
0176, 0178, 0179, 0188, 0190,  
0295

**Praxis** 0211**Priceclub** 0171**Prima**

0055, 0064, 0067, 0087

**Princeton Graphics** 0357**Proscan**

0114, 0180, 0222, 0265,  
0317(LCDTV)

**Proton**

0014, 0041, 0076, 0100, 0104,  
0113, 0114, 0126, 0157, 0176,  
0178, 0188, 0196, 0202, 0204,  
0205, 0214, 0280, 0295, 0339

**Prism** 0083, 0108, 0187**Pulsar**

0100, 0103, 0219, 0236, 0295

**Pulser** 0100, 0103, 0236**Quasar**

0050, 0068, 0083, 0108, 0146,  
0187, 0207, 0239, 0294

**Radio Shack**

0051, 0065, 0087, 0100, 0107,  
0114, 0148, 0157, 0175, 0177,  
0178, 0180, 0195, 0207, 0265,  
0292, 0295, 0342

**RCA**

0005, 0009, 0047, 0051, 0065,  
0066, 0068, 0100, 0105, 0108,  
0113, 0114, 0143, 0152, 0176,  
0180, 0190, 0206, 0213, 0222,  
0229, 0230, 0235, 0265, 0278,  
0279, 0281, 0294, 0295, 0296,  
0297, 0298, 0299, 0300, 0301

**Realistic**

0100, 0107, 0114, 0169, 0175,  
0177, 0178, 0180, 0195, 0207,  
0292, 0295, 0342

**Rhapsody** 0048**Rowa** 0055, 0067, 0087**Runco**

0114, 0171, 0219, 0236, 0288,  
0289

**Saba**

0002, 0036, 0037, 0046, 0047,  
0054, 0067, 0069, 0091, 0092,  
0095, 0097, 0100, 0121, 0124,  
0130, 0135, 0176, 0211, 0214,  
0217, 0228, 0246, 0250, 0273,  
0281, 0311

**Saisho** 0098

**Sampo**

0024, 0041, 0042, 0052, 0073,  
0086, 0100, 0106, 0107, 0113,  
0114, 0142, 0175, 0176, 0178,  
0205, 0206, 0214, 0248, 0260,  
0280, 0295, 0302(LCDTV), 0260,  
0327

**Samsung**

0005, 0070, 0100, 0107, 0113,  
0114, 0140, 0144, 0157, 0167,  
0170, 0171, 0175, 0176, 0178,  
0179, 0188, 0189, 0190, 0197,  
0200, 0214, 0237, 0240, 0249,  
0250, 0264, 0270, 0295, 0330

**Samsux 0178****Sansui 0234, 0235****Sanyo**

0014, 0024, 0025, 0026, 0027,  
0034, 0035, 0040, 0041, 0049,  
0051, 0110, 0117, 0120, 0168,  
0173, 0175, 0186, 0195, 0204,  
0214, 0218, 0231, 0232, 0241,  
0295, 0321(PlasmaTV),  
0327(LCDTV)

**Scimitsu 0100****Scotch 0100, 0114****Scott**

0100, 0114, 0036, 0137, 0148,  
0157, 0175, 0177, 0178, 0286,  
0295, 0342

**Sears**

0030, 0037, 0042, 0051, 0057,  
0065, 0067, 0100, 0101, 0110,  
0111, 0113, 0114, 0117, 0136,  
0168, 0171, 0175, 0176, 0178,  
0179, 0180, 0195, 0201, 0235,  
0265, 0295

**Seleco**

0002, 0003, 0005, 0007, 0008,  
0051, 0061, 0100, 0102, 0118,  
0119, 0126, 0130, 0132, 0133,  
0147, 0251, 0252, 0276, 0325,  
0326

**Semivox 0177****Semp 0149****SET 0098****Sharp**

0009, 0038, 0043, 0059, 0087,  
0106, 0113, 0114, 0133, 0157,  
0173, 0176, 0178, 0179, 0188,  
0192, 0206, 0207, 0208, 0287,  
0295, 0322(LCDTV), 0357

**Shogun 0100****Signature**

0037, 0063, 0065, 0100, 0180,  
0295

**Simpson 0060, 0114, 0132****Singer 0187****Sinudyne 0098****Sony**

0000, 0001, 0012, 0013, 0014,  
0024, 0045, 0046, 0061, 0073,  
0097, 0181, 0198, 0202, 0204,  
0214, 0232, 0245, 0246, 0283,  
0244(LCDTV)

**Soundesign**

0100, 0113, 0114, 0132, 0136,  
0176, 0177, 0295, 0342

**Sowa** 0005, 0014, 0024, 0057,  
0068, 0072, 0073, 0172, 0199,  
0200, 0204, 0214

**Spectricon** 0100, 0114, 0177,  
0202

**Squareview** 0030, 0042

**SSS**

0100, 0113, 0177, 0295, 0342

**Starlite** 0100, 0177, 0342

**Supra 0178****Supre-Macy**

0132, 0160, 0178

**Supreme** 0013, 0046

**SVA 0340****Sylvania**

0037, 0060, 0082, 0085, 0100,  
0109, 0113, 0114, 0127, 0131,  
0132, 0162, 0163, 0167, 0173,  
0175, 0176, 0282, 0292, 0295  
**Symphonic** 0030, 0042, 0136,  
0137, 0148, 0177, 0292, 0342

**Synco**

0014, 0024, 0073, 0198, 0202,  
0204, 0206, 0214

**Tai Wah** 0064, 0212

**Tandy**

0009, 0065, 0178, 0206, 0207

**Tashiko 0205****Tatung**

0005, 0010, 0014, 0020, 0024,  
0037, 0041, 0057, 0068, 0072,  
0073, 0083, 0101, 0172, 0187,  
0199, 0200, 0202, 0204, 0214,  
0239, 0294

**Tatung LCD TV**

0306, 0312, 0323

**TCL 0289****Technics**

0050, 0083, 0108, 0187, 0219,  
0222, 0265

**TECHNOVISION 0151****Techwood**

0050, 0083, 0100, 0108, 0113,  
0114, 0176, 0187, 0202, 0295

**Teco**

0002, 0014, 0028, 0029, 0061,  
0077, 0078, 0079, 0086, 0091,  
0142, 0183, 0187, 0204, 0331



**Teknika**

0005, 0037, 0055, 0063, 0100,  
0103, 0113, 0114, 0132, 0136,  
0157, 0160, 0167, 0171, 0176,  
0177, 0178, 0179, 0180, 0188,  
0190, 0201, 0295, 0342

**Telecaption II**

0136, 0147, 0178

**Telefunken** 0100**Teletex** 0002, 0049**Telerent** 0063, 0178, 0180**Tera**

0014, 0076, 0100, 0113, 0176,  
0204, 0205, 0214, 0295

**TEVION** 0323**Thomson** 0051, 0065, 0180**TMK**

0098, 0100, 0101, 0113, 0114,  
0176, 0295

**Tobo** 0067**Tomashi** 0054**Toshiba**

0003, 0010, 0018, 0020, 0024,  
0041, 0057, 0101, 0102, 0147,  
0150, 0168, 0171, 0172, 0175,  
0195, 0199, 0200, 0201, 0207,  
0214, 0256, 0337

**Tosonic** 0048**Totevision** 0178**Tri-Lex** 0071(MPEG Card)**Triumph** 0098**Tuntex** 0100**TVS** 0121**TVD** 0251, 0311**U-MEN** 0187**Universal** 0065, 0131, 0184**UPMOST** 0155 (MPEG Card)**Vector Research** 0114**Victor** 0067, 0081, 0165**Videocon** 0003, 0018**Vidikron** 0037**Vidtech**

0005, 0100, 0113, 0114, 0190,  
0295

**View Sonic**

0037, 0318, 0319, 0320,

**LCD TV:**

0305, 0308, 0324, 0260, 0092

**Viking** 0160**Visa** 0115**VIZIO**

0272, 0273, 0274, 0275

**Wards**

0005, 0037, 0051, 0060, 0063,  
0082, 0087, 0100, 0101, 0109,  
0113, 0114, 0116, 0131, 0132,  
0136, 0137, 0162, 0163, 0175,  
0176, 0178, 0180, 0184, 0190,  
0207, 0282, 0283, 0295

**Warton** 0081**Westinghouse** 0235**Whirlpool** 0196**White-****Westinghouse** 0326(LCDTV)**XR-1000** 0292**XR-10000** 0063**Yamaha**

0005, 0100, 0113, 0114, 0176,  
0190, 0295

**Yorx** 0114, 0175**Zenith**

0004, 0062, 0063, 0103, 0110,  
0180, 0219, 0233, 0235, 0236,  
0291, 0292, 0293, 0295

**Zonda** 0202